



**UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/877,684

06/17/97

VAUGHAN

G

96B035/2

IM22/1103

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EXAMINER

PASTERCZYK, J

ART UNIT

PAPER NUMBER

1755

DATE MAILED:

19
11/03/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
08/877,684

Applicant(s)
Vaughan et al.

Examiner
J. Pasterczyk

Group Art Unit
1755



☒ Responsive to communication(s) filed on Oct 11, 2000

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-8 and 10-32 is/are pending in the application.

Of the above, claim(s) 6-8, 10-12, 22-29, and 32 is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-5, 13-21, 30, and 31 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☒ Claims 1-8 and 10-32 are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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1. This Office action is in response to the amendment filed 10/11/00 and refers to the rejection made 4/11/00.

2. The amendment filed 2/8/99 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the deletion of "covalently" from p. 3, l. 10. This deletion appears to be more than a mere correction of a typographical error. With the new matter, the bond between the metal and the E atom could be of any kind, including covalent, dative, ionic, van der Waals, etc. While other prior art may have used incorrect symbols to refer to dative bonds, this examiner will adhere to the correct symbols of an arrow drawn from the donating atom to the accepting atom. In the structure in the table referred to by the applicant, the error could just as easily have been that the nickel was in the 4+ oxidation state, the Ni-N bonds were covalent, the C=N bonds should have been single bonds, and the bond between the two carbon atoms should have been double. There is nothing intrinsic in the case which requires the interpretation advanced by applicants.

Applicant is required to cancel the new matter in the reply to this Office action.

3. Claims 1-5, 13-21, 30 and 32 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification as originally filed required

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that the bonds between the transition metal atoms and the E atoms be covalent. Deletion of the word "covalent" makes the type of bond now be any type known to chemistry. The examiner notes that not all examiners necessarily have the same training, and that each application is examined separately. Moreover, the deletion of an entire word is more than correction of a mere "typographical error". If the examiner were to adopt applicants' contention with regard to the correct symbols for bonds, then the compounds of just about every issued patent could have any type of bond between any two atoms in any structure. While amendment to cure defects are permitted, the defect as well as what its correction should be must both be manifest under In re Oda. Neither burden has been met.

4. Claims 1-5, 13-21, 30 and 32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1 and 13, the preamble recitation of intended use carries no patentable weight without a further structural difference between the prior art and the claimed invention. Applicants argue that there is such a difference, but do not point to any structural data which would demonstrate that difference, instead merely relying on attorney's argument, which is insufficient. Applicants refer at the bottom of p. 13 of their amendment to fuller discussion of the issue below, but that discussion is also merely speculative without clear grounding in scientific evidence. On the other hand, when the palladium compound of Sommazzi is reacted with its bidentate neutral ligand, one of ordinary skill in the art would have expected that the neutral bidentate ligand would

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replace the two neutral monodentate ligands due to the chelate effect, resulting in the metal compound of the present claims.

It is still not clear against what the metal complex is stabilized, although applicants appear to concede that the language suggested by the examiner would be correct and help resolve the problem. If the type of stabilization is disclosed in the specification, applicants are requested to point out where such support may be found.

It is also still not clear what is meant by the "oxidation state of MX_r is satisfied". If as applicants contend it means that the entire LMX_r moiety is neutral, then how can that be reconciled with claims 17 and 21 which recite that the metal is in a cationic species? The two are mutually exclusive.

"(A) univalent anionic ligand" will be interpreted to mean only those specific examples given in either the specification or the claims; otherwise, the claims would be overbroad and omnibus with respect to this claimed feature.

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 1-3, 5, 13-14, 30 and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Sommazzi as cited in and for the reasons of record given in paragraph 7 of the previous Office action.

Applicants' main contention against Sommazzi appears to be that its compound does not clearly anticipate the present application's transition metal compound. However, as noted

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above, with the reaction between the palladium biscarbamate bisamine and the chelating bidentate ligand of the prior art, it would be scientifically expected that a compound of the presently-claimed stoichiometry would be formed. Applicants have not presented anything but attorney's argument to the contrary, nor have they presented evidence of the structures of their own compounds to compare to the prior art. Applicants also contend that a metal-carbon bond is normally considered necessary in olefin polymerization catalysts. However, neither their own catalysts nor those of e.g. Brookhart necessarily have such a feature.

7. Claims 1-5, 13-21, 30 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brookhart as cited in and for the reasons of record given in paragraph 9 of the previous Office action.


Applicants' principle argument against Brookhart appears to be that its loading on the support (found in the examples cited as well as col. 51, last full paragraph) does not read on that of the present claims. However, since the metals of the prior art are expensive, mere cost alone would have motivated one of ordinary skill in the art to use lower catalyst loadings with perhaps higher surface areas of the supports to result in similar catalytic activities. Nor have applicants presented any comparative data which would suggest the presence of an unexpected result in the present invention versus the prior art. Furthermore, drying a supported catalyst of its residual solvent is a conventional step in the preparation of supported catalysts since the solvent may interfere with proper cohesion between the support and the catalyst compound as well as the catalytic cycle of the compound.

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8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Pasterczyk whose telephone number is (703) 308-3497. Our fax number is 305-5433.


Mark L. Beil
Supervisory Patent Examiner
Technology Center 1700



J. Pasterczyk

October 31, 2000